Abstract

A transceiver is provided that can adapt itself to operate as an RF tag reader or as a bluetooth transceiver by changing its reception and transmission capabilities. The cost and area of an additional transceiver where both a bluetooth transceiver and an RF tag reader are required is avoided. The same radio part is used for both bluetooth and for RF tag reader operation. Since the operation band is the same, there is no need to change the center frequency of the resonance needed by the radio front-end. Software controlled adaptivity is included due to the different nature of these systems so that the mode of the radio hardware can be programmed easily and on the fly. This provides a software defined architecture tailored for bluetooth/RF tag operation. This invention integrates two different systems to one transceiver chip giving cost and space savings by reusing existing analog parts.